

DETERMINANTS OF SUBJECTIVE WELLBEING: LITHUANIAN CASE

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Abstract

This paper presents some selected results of the survey (representative sample, n=1002) which was conducted in Lithuania in 2014. This research was funded by the European Social Fund under the Global Grant measure (No. VP1-3.1-ŠMM-07-K-03-032). The study revealed various relations between Lithuanians' wellbeing, attitudes towards life, emotional states, and suicidal ideation. The results demonstrated statistically significant negative relationship between Lithuanians' satisfaction with life and negative emotional states: anxiety, psychological pain, sadness, hopelessness, helplessness, meaninglessness. It was found statistically significant positive relationship between Lithuanians' satisfaction with life and positive emotional states: joy, gratefulness, enthusiasm, trust, confidence, compassion, hopefulness, happiness, peacefulness. The results have also demonstrated positive correlations between satisfaction with life and positive life perceptions: clear goals in life, perceiving life as fulfilled, worthy living, pleasant, meaningful. The results might imply that in order to diminish the rates of suicides in Lithuania, there is a need to implement evidence based psycho-educational programs and interventions.

Keywords: Wellbeing, satisfaction with life, emotions

Introduction

Various surveys indicate that for the last two decades Lithuania has been among the countries demonstrating the highest rates of unhappiness in Europe. Diminished wellbeing could be related to Lithuanians' inability to cope with negative emotions and life pressures, resulting in heightened rates of suicides.

The article presents some selected results of the survey (representative sample, n=1002) which was conducted in Lithuania in 2014. The study aimed at revealing relations between Lithuanians' wellbeing, satisfaction with life, positive and negative emotional states, perceptions of life, and suicidal ideation. The overall survey aimed at evaluating various psychological (psychological capital, happiness, satisfaction with life domains, cognitive schemas) and other factors (income, housing, environment, consumption, education, health) related to life quality of Lithuanians.

I.

Wellbeing concept and determinants

In quality of life literature, there are many efforts to conceptualize well-being, including theories and inventories which explore emotional aspects of well-being, sensory hedonism, and life satisfaction or the cognitive component of subjective wellbeing. Some authors (for example, Seligman, 2002) focus on the distinction among the pleasant life, the engaged life, and the meaningful life, while others focus mostly on the life satisfaction (for example, Diener et al., 2010).

Seligman's concept of the pleasant life is highly parallel to the concept of "psychological happiness". An illustrative conceptualization of psychological happiness is Parnicki's theory of happiness (Parnicki, 1995), according to which happiness is viewed as a theoretical summation of separate momentary pleasures and pains: although happiness can refer to a particular moment, the term is used to describe a state of affect over much longer periods such as one's lifespan. Therefore, happiness is viewed as a conceptual summation of separate hedonic values, positive and negative, divided by the duration of that period (Seligman, 2012).

Prudential happiness, on the other hand, could be attained when a person achieves a high state of well-being, both mentally and physically (Veenhoven, 2003). Prudential happiness involves both the feelings of happiness and the action that generates personal growth, and in the context of Seligman's distinction among the pleasant life, the engaged life, and the meaningful life, prudential happiness seems most consistent with the engaged life (Seligman & Wu, 2009).

Perfectionist happiness refers to a life that is good in all respects, including a moral life. Perfectionist happiness is achieved when a person achieves a state of well-being plus leading a moral life. Haybron illustrates the concept of perfectionist happiness by describing an "evil" person: this person may be psychologically happy (high on psychological happiness), is well-off in every way (high on prudential happiness), but is a parasite to society (low on perfectionist happiness) (Haybron, 2008). In the context of

Seligman's (2002) distinction among the pleasant life, the engaged life, and the meaningful life, perfectionist happiness seems most consistent with the meaningful life (Sirgy & Wu, 2009).

The last theory views happiness as eudaimonia, and in recent years, a number of psychological theories of eudaimonia have been developed: self-determination theory (Ryan & Deci, 2000), the broaden-and-build theory of positive emotions (Fredrickson, 2001), and the theory of human flourishing (Ryff & Singer, 1996; Diener et al., 2010). Some authors view life satisfaction as a "cognitive" conceptualization of happiness or subjective well-being (it may involve judgments of fulfillment of one's needs, goals, and wishes), and assume that the affective correlates of subjective well-being are determined by cognitively based life satisfaction judgments (Frisch,)

In philosophical literature, there are also many different conceptualizations of happiness, or well-being. Jeremy Bentham (1969) viewed happiness as a state of being that people experience as a result of action by oneself or others. According to Benthamite tradition, happiness or well-being has a hedonic aspect, however, according to Aristotle tradition, is has an eudemonic aspect and it primarily means living a meaningful and fulfilling life (Sirgy, 2012).

Interdisciplinary authors have also contributed to the development of better conceptualization of well-being. For example, Warburton (1996) argued that happiness is a pleasant physiological sensation caused by neurochemical responses in the dopamine system in response to external stimuli that have rewarding properties. Therefore, people maximize their happiness by making decisions and engaging in behaviors that trigger the release of dopamine in the brain—the reward system (Sirgy, 2012).

Some authors (for example, Veenhoven, 2000) make the distinction between inner and outer QOL, while asserting that *inner well-being* can be conceptualized in terms of input conditions (e.g., ability to live a fulfilling life) versus *outer well-being* which is characterized in terms of the livability of the environment (the quality of the environment in the way the environment promotes personal well-being or life satisfaction, happiness, perceived life quality, or overall well-being) (Sirgy, 2012).

Evidence suggests that high levels of subjective well-being may facilitate health outcomes and longevity (e.g., Koopman et al., 2010) as well as creative thinking, problem-solving, and professional achievement: participants who report higher levels of subjective well-being tend to perform better on decision-making tasks in terms of accuracy, clerical error checking, anagram problem-solving, and original and flexible thinking (Diener & Seligman, 2004). Experimental evidence suggests that well-being brings out the best in people, making them more social, cooperative, and ethical (e.g., Forgas, 2006).

Therefore, there are many endeavors to describe and explore psychological well-being, focusing on emotional or cognitive, objective or subjective factors of it. In the study of Lithuanian population presented in this article, we focused on emotional as well as cognitive aspects of wellbeing, exploring mostly subjective evaluations of experiences. Psychological wellbeing factors of Lithuanian population in this research encompass 1) presence of positive emotions, 2) subjective satisfaction with life, 3) absence of persistent negative affect, and 4) absence of suicidal ideation.

Method

Samples and procedure

This study used a test design utilizing a heterogeneous random sample of 1002 persons representing Lithuanian population. All the participants were personally asked to participate in the study and were personally interviewed at their home in February – April 2014. This research was funded by the European Social Fund under the Global Grant measure (No. VP1-3.1-ŠMM-07-K-03-032). The interview of one person on average took up to 60 minutes. The sample was selected in a multiscaled probabilistic way so that every citizen of Lithuania might have an equal probability to be interviewed. The data were collected in 20 cities and 29 villages of Lithuania.

The participants of the study were 469 men (46,8%) and 533 (53,2%) women. Additional demographics of the sample included a mean age of 49.29 years (Minimum – 18 years old, Maximum – 90 years old, Std. Deviation – 16,206). The majority of the participants were married (48,9%), some respondents lived with a partner (9,7 %), some indicated they are separated (12,2%), some were widows (13,8%) or lived alone (12%). The mean height of the respondents was 170,93 cm (Minimum – 142 cm, Maximum – 205 cm, Std. Deviation – 8,99), and the mean weight was 77,37 kg. (Minimum – 42 cm, Maximum – 270 cm, Std. Deviation – 16,699); the mean BMI of Lithuanians in this research was 26.33. The majority of respondents have a higher education (51,4%), but some have just primary (2,7%) or secondary (6,5%) education. The income of the interviewed Lithuanians per family is distributed as follows (not including taxes): the income of the majority of the sample (44,7%) is just 500 dollars or less per month, some (37,4%) get 501-1000 dollars per month, some (13,3%) get 1001-2000 dollars per month, and just a minority (2,2%) get more than 2000 dollars per month, with some of them (0,1%) reaching up to 6500 dollars per month.

Measures

The measures used in this study included:

1) *The Satisfaction with Life Scale* or *SWLS* (to assess psychological wellbeing) which gained a great deal of popularity in QOL research; this measure was developed by Ed Diener (Diener, Emmons, et al., 1985) and it involves five questions, rated on a Likert-type scale including response options ranging from “totally disagree” to “totally agree”. The SWLS has been validated in many contexts. The Satisfaction with Life Scale demonstrated acceptable reliability in this study: SWLS Cronbach’s alpha for this sample was $\alpha = .89$ (n=1002).

2) *Positive, Negative and Suicidal risk related states scale*. To assess specific states of Lithuanian population, we have created a 22-item modified version of the PANAS (Watson, Clark, Tellegen, 1988). Representative sample of 1002 subjects rated themselves using Past Week instructions. All responses were anchored on a 6-point Likert scale, ranging from “never” to “always”. *Positive, Negative and Suicidal risk related states scale’s* subscales demonstrated acceptable reliability in this study: *Positive states* subscale’s (9 items: joy, gratefulness, trust, confidence, compassion, hopefulness, happiness, peacefulness). Cronbach’s alpha for this sample was = .94, *Negative states* subscale’s (8 items: pique, anger, anxiety, psychological pain, guilt, sadness, fear, stress). Cronbach’s alpha for this sample was = .90, *Suicidal risk related states* subscale’s (5 items: unwillingness to live, hopelessness, helplessness, meaninglessness, shame). Cronbach’s alpha for this sample was = .89 (n=1002).

3) *Life Perceptions scale*. To assess Lithuanians’ attitudes towards life, i.e. specific cognitions related to subjective wellbeing, we have created a 8 – item questionnaire based on the works of positive psychology scholars (Diener, 1994; Diener, 2000, Diener, 2003; Diener, Wirtz, Tov, Kim-Prieto, Choi, Oishi, & Biswas-Diener, 2010; Diener, Oishi, & Lucas, 2003; Diener & Seligman, 2002; Diener, Emmons, Larsen, & Griffin, 1985; Fredrickson, 2001; Frisch, 2006; Parducci, 1995; Ryan & Deci, 2000; Ryff & Singer, 1996; Seligman, 2002; Tov & Diener, 2009; Sirgy & Wu 2009; Sirgy, 2012; Warburton, 1996; Veenhoven, 2003). It involves questions, rated on a Likert-type scale including 6 – point response options ranging from “totally disagree” to “totally agree”. Some sample items for Life Perceptions scale included the following: “I have clear goals in life”, “Life is pleasant”, “Life is meaningful”, “Life is worthy living”. *Life Perceptions* scale demonstrated acceptable reliability in this study: Cronbach’s alpha for this sample was = .87 (n=1002).

4) *Suicidal ideation questionnaire*. To assess suicidal ideations, i.e. personal predispositions, attitudes towards suicide, we have created a 2 – item questionnaire self- rated on a Likert-type scale including 6 – point

response options ranging from “totally disagree” to “totally agree” (“I am seriously considering suicide as a possible solution of my problems”, “A person has right to commit suicide if he/she wants to”). Suicidal ideation questionnaire demonstrated acceptable reliability in this study: Cronbach’s alpha for this sample was = .70 (n=1002). Just 57% of respondents answered that they “totally disagree” with the statement “I am seriously considering suicide as a possible solution of my problems”, while a bit more than 9% “agree” or “totally agree” with the statement and it means that these respondents might be at high suicidal risk.). Just 43% of respondents answered that they “totally disagree” with the statement “A person has right to commit suicide if he/she wants to”, and it means that the rest of the representative sample of Lithuanian population have somewhat positive attitude towards suicidal behavior.

Results

Given the focus of analysis on relationship between satisfaction with life and related variables, bivariate correlations were calculated. Table 1 displays means, standard deviations and correlations for Lithuanians’ satisfaction with life and negative emotional states during the last week. The results demonstrated some statistically significant correlations between the variables.

Table 1. Means, Standard Deviations, and Correlations of Lithuanians’ Satisfaction with Life, and negative emotional states during the last week (n=1002)

	M	SD	1	2	3	4	5	6	7	8	9
1. Satisfaction with life	3,55	1,067	1								
2. Pique	2,65	1,647	-,054	1							
3. Anger	2,75	1,570	-,013	,643**	1						
4. Anxiety	3,03	1,565	-,082**	,551**	,576**	1					
5. Psychological pain	2,47	1,587	-,068*	,660**	,545**	,623**	1				
6. Guilt	2,16	1,442	,044	,529**	,463**	,529**	,611**	1			
7. Sadness	2,97	1,558	-,096*	,569**	,537**	,633**	,650**	,545**	1		
8. Fear	2,40	1,563	-,052	,525**	,472**	,615**	,631**	,597**	,613**	1	
9. Stress	3,05	1,695	-,029	,476**	,505**	,513**	,496**	,396**	,461**	,477**	1

** - Correlation is significant at 0.01 level (2-tailed).

* - Correlation is significant at 0.05 level (2-tailed).

The results demonstrated statistically significant (even though relatively weak) negative relationship between Lithuanians’ satisfaction with life and negative emotional states during the last week: anxiety ($r=-.082$, $p<0.01$), psychological pain ($r=-.068$, $p<0.05$), sadness ($r=-.096$, $p<0.05$).

Furthermore, we analyzed relationship between Lithuanians’ satisfaction with life and suicidal risk related emotional states - hopelessness,

helplessness, meaningfulness - during the last week. Table 2 displays means, standard deviations and bivariate correlations for study variables.

Table 2. Means, Standard Deviations, and Correlations of Lithuanians' satisfaction with life and suicidal risk related emotional states during the last week (n=1002)

	M	SD	1	2	3	4
1. Satisfaction with life	3,55	1,067	1			
2. Hopelessness	2,02	1,493	-,062*	1		
3. Helplessness	2,25	1,553	-,100**	,753**	1	
4. Meaninglessness	2,11	1,484	-,075*	,754**	,794**	1

** - Correlation is significant at 0.01 level (2-tailed).

* - Correlation is significant at 0.05 level (2-tailed).

The results demonstrated statistically significant negative relationship between Lithuanians' satisfaction with life and suicidal – risk related emotional states: hopelessness ($r=-.062$, $p<0.01$), helplessness ($r=-.100$, $p<0.01$), meaninglessness ($r=-.075$, $p<0.01$).

As this study is based on theoretical framework of positive psychology, we have also analyzed relationship between Lithuanians' satisfaction with life and positive states experienced during the last week, such as compassion, gratefulness, hopefulness, joy, enthusiasm, trust, confidence, happiness, and peacefulness. Table 3 displays means, standard deviations and correlations for these variables.

Table 3. Means, Standard Deviations, and Correlations of Lithuanians' satisfaction with life and positive emotional states during the last week (n=1002)

	M	SD	1	2	3	4	5	6	7	8	9	10
1. Satisfaction with life	3,55	1,067	1									
2. Joy	4,00	1,527	,400**	1								
3. Gratefulness	3,94	1,536	,357**	,741**	1							
4. Enthusiasm	3,58	1,635	,433**	,687**	,720**	1						
5. Trust	3,74	1,605	,391**	,645**	,687**	,805**	1					
6. Confidence	3,91	1,524	,456**	,666**	,661**	,750**	,788**	1				
7. Compassion	3,84	1,621	,276**	,485**	,588**	,574**	,617**	,626**	1			
8. Hopefulness	3,89	1,555	,458**	,660**	,654**	,768**	,742**	,768**	,609**	1		
9. Happiness	3,93	1,548	,515**	,722**	,680**	,721**	,712**	,740**	,581**	,786**	1	
10. Peacefulness	3,85	1,497	,485**	,577**	,617**	,605**	,618**	,666**	,515**	,649**	,745**	1

** - Correlation is significant at 0.01 level (2-tailed).

The results demonstrated statistically significant positive relationship between Lithuanians' satisfaction with life and positive emotional states during the last week: joy ($r=.400$, $p<0.01$), gratefulness ($r=.357$, $p<0.01$),

enthusiasm ($r=.433$, $p<0.01$), trust ($r=.391$, $p<0.01$), confidence ($r=.456$, $p<0.01$), compassion ($r=.276$, $p<0.01$), hopefulness ($r=.458$, $p<0.01$), happiness ($r=.515$, $p<0.01$), peacefulness ($r=.485$, $p<0.01$).

Table 4 displays correlations between Lithuanians' satisfaction with life and regression-based scores on positive, negative, and suicide – related states' factors. The results demonstrated statistically significant positive relationship between Lithuanians' experienced positive emotional states during the last week and satisfaction with life ($r=.532$, $p<0.01$). Statistically significant negative correlations were found between negative emotional states and satisfaction with life ($r=-.257$, $p<0.01$), and also between suicide - related emotional states and satisfaction with life ($r=-.143$, $p<0.01$).

Table 4. Correlations between Lithuanians' satisfaction with life and Regression-Based Scores on Positive, Negative, and Suicidal States' Factors (n = 1002)

	Positive states	Negative states	Suicidal states
Satisfaction with Life	.532**	-.257**	-.143**

** . Correlation is significant at the 0.01 level (2-tailed).

Furthermore, we analyzed the link between Lithuanians' satisfaction with life and positive life perceptions. Table 5 displays means, standard deviations and correlations for these study variables.

Table 5. Means, Standard Deviations, and Correlations of Lithuanians' satisfaction with life and positive life perceptions (n=1002)

	M	SD	1	2	3	4	5	6
1. Satisfaction with life	3,55	1,067	1					
2. Life perceived as having clear goals	4,21	1,214	.422**	1				
3. Life perceived as fulfilled	4,14	1,178	.576**	.434**	1			
4. Life perceived as worthy living	4,77	1,204	.427**	.359**	.668**	1		
5. Life perceived as pleasant	4,08	1,123	.610**	.426**	.604**	.596**	1	
6. Life perceived as meaningful	4,38	1,253	.489**	.463**	.695**	.663**	.668**	1

** - Correlation is significant at 0.01 level (2-tailed).

Therefore, we have found positive bivariate correlations between satisfaction with life and positive life perceptions: “clear goals in life” ($r=.422$, $p<0.01$), “life is fulfilled” ($r=.576$, $p<0.01$), “life is worthy living” ($r=.427$, $p<0.01$), “life is pleasant” ($r=.610$, $p<0.01$), “life is meaningful” ($r=.489$, $p<0.01$).

The results of bivariate correlations of Lithuanians' suicidal ideation and positive life perceptions are presented in Table 6. As it could be observed, there is a statistically significant negative relationship between suicidal ideation and overall positive life perception.

Table 6. Correlations of Lithuanians' suicidal ideation and positive life perceptions (n=1002)

	Mean	Std. Deviation	1	2
1. Suicidal ideation	2,0045	1,25306	1	
2. Positive Life Perception	4,1592	,94217	-,068* p=.030	1

* - Correlation is significant at 0.05 level (2-tailed).

To sum up, Lithuanians' suicidal ideation was found to be negatively correlated with positive life perceptions, while satisfaction with life was found to be strongly positively correlated with positive life perceptions. In order to decrease the rates of suicides in Lithuania and increase Lithuanians' wellbeing, there is a necessity for psycho-educational/ cognitive interventions (for example, psychological capital intervention), which could be highly beneficial for this society.

Conclusion

The present study complements some previous studies done in various countries (Khan et al., 2002; Andres, Collings & Qin, 2010; Brown et al., 2000; Sareen, Cox, Afifi, de Graaf, Asmundson, et al., 2005; Have, de Graaf, van Dorsselaer, Verdurmen et al., 2009; Brown, Beck, Steer, & Grisham, 2000; Arria et al., 2009; Crump, Sundquist, Sundquist, Winkleby, 2013; Ishtiak-Ahmed, Perski, Mittendorfer-Rutz, 2013). It revealed various relations between Lithuanians' satisfaction with life, emotional states, life perceptions, and suicidal ideation:

- 1) The results demonstrated statistically significant (even though relatively weak) negative relationship between Lithuanians' satisfaction with life and negative self-reported emotional states during the last week: anxiety, psychological pain, sadness. The results demonstrated statistically significant negative relationship between Lithuanians satisfaction with life and suicidal – risk related emotional states: hopelessness, helplessness, meaninglessness.
- 2) The results demonstrated statistically significant positive relationship between Lithuanians' satisfaction with life and positive emotional states during the last week: joy, gratefulness, enthusiasm, trust, confidence, compassion, hopefulness, happiness, peacefulness. Statistically significant positive relationship was found between Lithuanians' self-reported positive emotional states during the last week and satisfaction with life. Statistically significant negative correlations were found between negative emotional states and satisfaction with life, and also between suicide - related emotional states and satisfaction with life.

- 3) The results have also demonstrated positive correlations between satisfaction with life and positive life perceptions: clear goals in life, perceiving life as fulfilled, worthy living, pleasant, meaningful. Moreover, statistically significant negative relationship was found between suicidal ideation and overall positive life perception.

To sum up, the present study showed that life satisfaction positively correlates with positive emotional states and positive life perceptions, while Lithuanians' suicidal ideation was found to be negatively correlated with positive life perceptions. These results complement the works of other authors who found positive relationship between satisfaction with life and cognitions (Diener & Seligman, 2002) as well as emotions (Forgas, 2006; Diener et al., 2010). Nevertheless, this relationship requires further exploration. Anyway, in order to increase Lithuanians' wellbeing, there is a need for psycho-educational/ cognitive interventions (for example, PsyCap intervention, Luthans et al., 2007), which proved to be beneficial for many societies.

References:

- Andres, A.R., Collings, S & Qin, P. (2010). Sex-specific impact of socio-economic factors on suicide risk: a population-based case-control study in Denmark. *European Journal of Public Health*, 20: 265–270.
- Arria, A.M., O'Grady K.E., Caldeira K.M., Vincent K.B., Wilcox H.C. & Wish E.D. (2009). Suicide ideation among college students: A multivariate analysis. *Archives of Suicide Research*, 13:230-46.
- Bentham, J. (1969). An introduction to the principles of morals and legislation. In M. P. Mack (Ed.), *A Bentham reader* (pp. 73–144). New York: Pegasus.
- Brown, G. K., Beck, A. T., Steer, R. A. & Grisham, J. R. (2000). Risk factors for suicide in psychiatric outpatients: A 20-year prospective study. *Journal of Consulting and Clinical Psychology*, 68, 371–377. doi:10.1037/0022-006X.68.3.371
- Crump C., Sundquist K., Sundquist J. & Winkleby, M.A. (2013). Sociodemographic, psychiatric and somatic risk factors for suicide: a Swedish national cohort study. *Psychological Medicine*, 1–11.
- Diener, E. (1994). Assessing subjective well-being: Progress and opportunities. *Social Indicators Research*, 31, 103–157.
- Diener, E. (2000). Subjective well-being: The science of happiness and a proposal for a national index. *American Psychologist*, 55, 34–43.
- Diener, E. (2003). What is positive about positive psychology: The curmudgeon and Pollyanna. *Psychological Inquiry*, 14, 115–120.
- Diener, E. & Seligman, M. E. P. (2004). Beyond money: Toward an economy of well-being. *Psychological Science in the Public Interest*, 5, 1–

31. Republished in E. Diener (Ed.). (2009). *The science of well-being: The collected works of Ed Diener* (pp. 201–265). Dordrecht, the Netherlands: Springer.
- Diener, E., Emmons, R. A., Larsen, R. J. & Griffin, S. (1985). The satisfaction with life scale. *Journal of Personality Assessment*, 49, 71–75.
- Diener, E., Oishi, S. & Lucas, R. E. (2003). Personality, culture, and subjective well-being. *Annual Review of Psychology*, 54, 403–425.
- Diener, E., Wirtz, D., Tov, W., Kim-Prieto, C., Choi, D., Oishi, S. & Biswas-Diener, R. (2010). New well-being measures: Short scales to assess flourishing and positive and negative feelings. *Social Indicators Research*, 97, 143–156.
- Diener, E. & Seligman, M. E. P. (2002). Very happy people. *Psychological Science*, 13, 80–83.
- Forgas, J. P. (2006). Affective influences on interpersonal behavior: Towards understanding the role of affect in everyday interactions. In J. P. Forgas (Ed.), *Affect in social thinking and behavior* (pp. 269–290). New York: Psychology Press.
- Fredrickson, B. L. (2001). The role of positive emotions in positive psychology: The broaden and-build theory of positive emotions. *American Psychologist*, 56, 219–226.
- Frisch, M. B. (2006). *Quality of life therapy: Applying a life satisfaction approach to positive psychology and cognitive therapy*. New York: Wiley.
- Have, M, de Graaf R, van Dorsselaer S, Verdurmen J, van 't Land H, et al. (2009). Incidence and course of suicidal ideation and suicide attempts in the general population. *Canadian Journal of Psychiatry*, 54: 824–833.
- Hayborn, D. M. (2008). *The pursuit of unhappiness*. Oxford, UK: Oxford University Press.
- Ishtiaq-Ahmed, K, Perski, A & Mittendorfer-Rutz, E (2013) Predictors of suicidal behaviour in 36,304 individuals sickness absent due to stress-related mental disorders — a Swedish register linkage cohort study. *BMC Public Health*, 13.
- Khan A., Leventhal R.M., Khan S. & Brown, W.A. (2002). Suicide risk in patients with anxiety disorders: a meta-analysis of the FDA database. *Journal of Affective Disorders*, 68: 183– 190.
- Koopmans, T. A., Geleijnse, J. M., Zitman, F. G. & Giltay, E. J. (2010). Effects of happiness on all-cause mortality during 15 years of follow-up: The Arnhem elderly study. *Journal of Happiness Research*, 11 , 113–124.
- Luthans F., Youssef C.M., Avolio B.J. (2007). *Psychological capital*. New York: Oxford University.
- Parducci, A. (1995). *Happiness, pleasure, and judgment: The contextual theory and its applications*. Mahwah, NJ: Lawrence Erlbaum Associates.

- Ryan, R. M. & Deci, E. L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist*, 55, 68–78.
- Ryff, C. D. & Singer, B. (1996). Psychological well-being: Meaning, measurement, and implications for psychotherapy research. *Psychotherapy and Psychosomatics*, 65 , 14–23.
- Sareen J, Cox, BJ, Afifi, TO, de Graaf, R, Asmundson, GJ, et al. (2005). Anxiety disorders and risk for suicidal ideation and suicide attempts: a population-based longitudinal study of adults. *Archives of General Psychiatry*, 62: 1249–1257.
- Seligman, M. E. P. (2002). *Authentic happiness: Using the new positive psychology to realize your potential for lasting fulfillment*. New York: The Free Press.
- Sirgy M. J. (2012). *The Psychology of Quality of Life. Hedonic Well-Being, Life Satisfaction, and Eudaimonia*. Springer Science+Business Media B.V. 2012.
- Sirgy, M. J. & Wu, J. (2009). The pleasant life, the engaged life, and the meaningful life: What about the balanced life? *Journal of Happiness Studies*, 10 , 183–196.
- Tov, W. & Diener, E. (2009). The well-being of nations: Linking together trust, cooperation, and democracy. In E. Diener (Ed.), *The science of well-being: The collected works of Ed Diener* (pp. 155–173). Dordrecht, the Netherlands: Springer.
- Veenhoven, R. (2000). The four qualities of life. *Journal of Happiness Studies*, 1, 1–39.
- Veenhoven, R. (2003). Hedonism and happiness. *Journal of Happiness Studies*, 4 , 437–457.
- Warburton, D. (1996). The functions of pleasure. In D. Warburton & N. Sherwood (Eds.), *Pleasure and Quality of Life*. Chichester, UK: Wiley.
- Watson, D., Clark, L. A., & Tellegen, A. (1988). Development and validation of brief measures of positive and negative affect: The PANAS scales. *Journal of Personality and Social Psychology*, 54(6), 1063-1070.